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# Wound Care during COVID-19 Pandemic



Dear Editor,

The spread of the COVID-19 has profoundly affected the way we conduct our medical practices, resulting in a decrease in necessary medical care, including the wound healing specialty. The actual period of COVID-19 pandemic limits the ability to practice wound healing in normal conditions. Patients with vascular leg ulcers represent an extremely vulnerable population, with poor quality of life caused by the pain directly related to both ulcer duration and ulcer area. These patients must not be overlooked because of the irreversible consequences that we will observe. If ischemic and venous wounds are not treated or managed, the results could be drastic, such as infections, sepsis, amputations, or even fatalities.

# DOCTORS AND PATIENTS' POINT OF VIEW: TWO SIDES OF THE SAME COIN

To dive deeper into the impact of COVID-19 on wound healing, we designed 2 surveys (supplementary material, online): one targeting medical doctors and nurses involved in wound care, and one targeting patients with arterial and venous leg ulcers and their caregivers. The surveys were shared online using different social media platforms. The surveys were available from May 4 to May 10, 2020, and were anonymous. Survey respondents were asked to identify their state of practice (doctor/nurse) or their condition (patient/caregiver). All the respondents were from Italy.

The first survey was completed by 46 respondents, 34 (73.9%) medical doctors (MD), and 12 (26.1%) nurses. When asked if the COVID-19 pandemic affected the management of wound dressings, 76.1% answered "yes", showing that this is a widely shared problem among our specialty. In 82.6% of cases, MD and nurses observed a decrease in patients' appointments. In case of missed appointments, contact with the patient was not maintained in 21.7% of cases. The most used contact method was

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Ann Vasc Surg 2020; 68: 93–94 https://doi.org/10.1016/j.avsg.2020.06.044 © 2020 Elsevier Inc. All rights reserved. Published online: 24 June 2020 telephone calls (58.7% of cases), with messages as the second one (43.5%). In half of the cases, MD and nurses have changed their dressing methods, by simplifying it; but only in 17.4%, they made a video to educate patients and caregivers on the proper way to wound care.

The patients and caregivers' survey was completed by 39 respondents, 28 (71.8%) patients, and 11 (30.8%) caregivers. From their point of view, only 22.6% of cases went to the wound clinic as usual. In 59% of cases, the frequency of appointments at the clinic has drastically decreased. In the case of missed appointments, 60.9% of cases did not maintain any type of contact with the specialist. The dressings were made at home by familiars in 43.6% of cases, by the patient in 35.9%, and by a nurse in 17.9%. In the 12.8% of cases, the patients did not change the wound dressing during the pandemic. In 20.5% of patients, an antibiotic was added to their usual therapy and a painkiller in 5.1% of cases. During the pandemic, the type of dressing was simplified in 33.3% of cases. Nevertheless, in 15.4% of the patients said that the ulcer has worsened in terms of dimensions, depth, and exudation. Bar chart of the principal responses of both groups is presented in Figure 1.

## MANAGEMENT OF LEG ULCERS

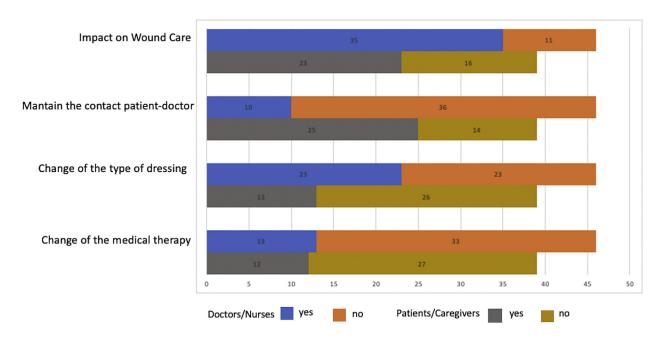
Successful management of leg ulcers is crucial for preventing long-term morbidity and lowering the risk of amputations. This can be achieved with a multifaceted approach, with the patients and their caregivers at the center.

Telemedicine should be considered the best way to prevent the spread of COVID-19 and provide relevant care to chronic wound patients at the same time. It is important for the specialist to

- always keep the contact with the patient, including telephone calls and photos of the lesion bi-weekly;
- assess by phone the presence of signs and symptoms: pain, redness, heat, swelling, drainage (description of the consistency and color), fever, chills, and increased pain:
- educate the patients and their family to how to perform the wound care;
- Simplify the dressing and consider the support of an explanatory video.

Moreover, the shift from hospitals to community care places has increased demand for family caregivers, a valuable constant during these uncertain times.

Social-distancing measures must also involve caregivers, who always have to wear personal protective equipment during wound care and maintain physical distance between them and the patient. Vascular leg



**Fig. 1.** Bar chart of the responses by doctors/nurses (blue = yes; orange = no) and patients/caregivers (grey = yes; ocher = no) regarding wound care.

ulcers pose a heavy emotional burden on the caregivers, similar to other major diseases, and lower only to what was observed for oncological and persistent vegetative status patients.<sup>2</sup> Even more in this period, patients but also their caregivers need to be psychologically supported.

To conclude, wound care with a regular follow-up needs to be considered as an essential service, requiring a regular provider-patient interaction.

### Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.avsg.2020.06.044.

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